

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

- DRI IC - TION NO	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
APPLICATION NO. 09/755,203	01/08/2001	John N. Sharood	11331-003001 / 99555 P1 .4827 EXAMINER		
	; <sup>/</sup> on : 01/20/2004				
FISH & RICHARDSON P.C.			CAO; CHUN		
1425 K STREE	T, N.W.		ART UNIT .: PAPER NUMB		
11TH FLOOR WASHINGTO	N, DC 20005-3500		2115		
,			DATE MAILED: 01/20/2004		
				1	

Please find below and/or attached an Office communication concerning this application or proceeding.

1

Application No.   Application No.   Application No.   Applicating				San No.	Applicant(s)	4		
Period for Reply  A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILUNG DATE of this communication appears on the cover sheet with the correspondence address Period for Reply  A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILUNG DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.134(e). In no event, however, may a reply be timely filled sheet 3 Key 60 MONTHS from the mailing date of this communication.  - If the period for may be appointed above, the maximum statutory period will apply and will expire 3 Key 60 MONTHS from the mailing date of this communication.  - Failur to represe the appointed above, the maximum statutory period will apply and will expire 3 Key 60 MONTHS from the mailing date of this communication.  - Failur to represe which the extra control period for apply with the statutory minimum of the period will apply and will expire 3 Key 60 MONTHS from the mailing date of this communication.  - Failur to represe which the service of the communication of the communication of the communication of the communication of the communication.  - Failur to represe maximum statutory period will apply and will expire 3 Key 60 MONTHS.  - Failur to represe maximum statutory period will apply and will expire 3 Key 60 MONTHS.  - Failur to represe maximum statutory period will apply and will expire 3 Key 60 MONTHS.  - Failur to represe maximum statutory period will apply and will expire 3 Key 60 MONTHS.  - Failur to represe maximum statutory period will apply and will expire 3 Key 60 MONTHS.  - Failur to represe maximum statutory maximum statutory period will apply and will expire 3 Key 60 MONTHS.  - The statutory will be apply with the statutory statutory and the statutory statutory statutory and the statutory statutory statutory statutory.  - Statutory and the statutory statutory statutory and the statutory statutory statutory statutory.  - Statutory and the statutory statutory statutory statutory sta			Applicat	tion No.	Applicant(s)			
Period for Reply  A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ③ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  Edutorisos for many be swalled used the provisors of J CER 1.138(a). In no event, however, may a reply be limely filed after 53.K (b) MONTHS with the statutory replication of the state	•			203		/		
Period for Reply  A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  1 Statement of the may be a validate under the provisions of 3 CFR 1.18(6). In an event, however, may a reply be timely filed after EX (8) MONTHS from the mailing date of this communication. The provision of the communication of the provision of the communication of the provision of the provision of the provision of the communication of the provision of the provisi		Office Action Summary	Examine	er	Art Unit			
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MALLING DATE OF THIS COMMUNICATION.  - Extractions of inter-may be a common process of the common p					· · · · · · · · · · · · · · · · · · ·			
THE MAILING DATE OF THIS COMMUNICATION.  Extensions of mer may be waitables under the provisions of 37 CPR 1.136(a). In no event, however, may a reply be timely filled aller SIX (6) MODITIS from the mailing date of the six (6) MODITIS from the mailing date of the six (6) MODITIS from the mailing date of this communication of the six (6) MODITIS from the mailing date of this communication of the six (7) MODITIS from the mailing date of this communication of the six (7) MODITIS and the mailing date of this communication.  Faller to reply verified the six of the six of the six of the communication, and the six of the communication of the communication.  Faller to reply verified the six of the six of the six of the communication, even if timely filed, may reduce any secure place them adjustment. See 37 CPR 1.704(b)  Status  1) [X Responsive to communication(s) filed on 08 January 2001.  2a) This action is FINAL.  2b) [X This action is final.  2b) [X This action is formation of the maining date of the communication, even if timely filed, may reduce any secure of the six of the six of the communication is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims  4) [X Claim(s) 1-36 is/are pending in the application.  4a) Of the above claim(s) is/are allowed.  5) [Claim(s) 1-37 and 29-36 is/are rejected.  7) [X claim(s) 1-71+27 and 29-36 is/are rejected.  7) [X claim(s) 1-71+27 and 29-36 is/are rejected to]  7) [X claim(s) 1-71+27 and 29-36 is/are rejected to]  8) [X The specification is objected to by the Examiner.  10) [X The drawing(s) filed on 25 May 2001 is/are: a) [X accepted or b) [X objected to by the Examiner.  Application Papers  9) [The specification is objected to by the Examiner.  10) [X The drawing(s) filed on 25 May 2001 is/are: a) [X accepted or b) [X objected to by the Examiner.  Application from the provision of the foreign priority under 35 U.S.C. § 119(a) (d) or (f).  1) [X objected to by the carrier of the priority documents have been	Period fo	r Reply				S		
2a) This action is FINAL.  2b) This action is non-final.  3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims  4) Claim(s) 1-36 is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.  5) Claim(s) is/are allowed.  6) Claim(s) 1-136 is/are allowed.  7) Claim(s) 8-13 and 28 is/are objected to.  8) Claim(s) 8-13 and 28 is/are objected to.  9) The specification is objected to by the Examiner.  10) The drawing(s) filed on 25 May 2001 is/are: a) accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. §§ 119 and 120  12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received in Application No.  2. Certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies on the received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for messic priority under 35 U.S.C. §§ 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  a) The translation of the foreign language provisional application or in an Application Data Sheet. 37 CFR 1.78.  Attachment(s) Hotice of References Cited (PTO-892)  1)	THE N - Exter after - If the - If NO - Failu - Any r earns	MAILING DATE OF THIS COMMUL nsions of time may be available under the provision SIX (6) MONTHS from the mailing date of this corperiod for reply specified above is less than thirty period for reply is specified above, the maximum re to reply within the set or extended period for re- reply received by the Office later than three month	NICATION.  ns of 37 CFR 1.136(a). In no of the control of the cont	event, however, may a reply be tatutory minimum of thirty (30) will expire SIX (6) MONTHS find	e timely filed  days will be considered timely.  rom the mailing date of this commu  NED (35 U.S.C. § 133).	nication.		
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims  4) ○ Claim(s) 1-36 is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.  5) ○ Claim(s) is/are allowed.  6) ○ Claim(s) is/are allowed.  7) ○ Claim(s) 1-7.14-27 and 29-36 is/are rejected.  7) ○ Claim(s) are subject to restriction and/or election requirement.  Application Papers  9) ○ The specification is objected to by the Examiner.  10) ○ The drawing(s) filed on 25 May 2001 is/are: a) ○ accepted or b) ○ objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) ○ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. §§ 119 and 120  12) ○ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) ○ All b) ○ Some * c) ○ None of:  1. ○ Certified copies of the priority documents have been received.  3. ○ Copies of the certified copies of the priority documents have been received in his National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  13) ○ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet.  37 CFR 1.78.  a) ○ The translation of the foreign language provisional application has been received.  14) ○ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the fir	1)⊠	Responsive to communication(s) t	filed on <u>08 January 20</u>	<u>001</u> .				
Claim(s) 1-36 is/are pending in the application.  4) ○ Claim(s) 1-36 is/are pending in the application.  4a) Of the above claim(s)			•					
4)  Claim(s) 1.36 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration.  5)  Claim(s) is/are allowed. 6)  Claim(s) 1.7.14-27 and 29-36 is/are rejected.  7)  Claim(s) 8.13 and 28 is/are objected to. 8)  Claim(s) are subject to restriction and/or election requirement.  Application Papers  9)  The specification is objected to by the Examiner.  10)  The drawing(s) filed on 25 May 2001 is/are: a)  accepted or b)  objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. §§ 119 and 120  12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a)  All b)  Some * c) None of:  1.  Certified copies of the priority documents have been received.  2.  Certified copies of the priority documents have been received in Application No  3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  13)  Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  a)  The translation of the foreign language provisional application has been received.  14)  Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  Attachment(s)  1) Notice of References Cited (PTO-892	3)□	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
4a) Of the above claim(s) is/are withdrawn from consideration.  5) □ Claim(s) is/are allowed.  6) ☒ Claim(s) <u>1-7.14-27 and 29-36</u> is/are rejected.  7) ☒ Claim(s) <u>1-7.14-27 and 29-36</u> is/are rejected to.  8) □ Claim(s) are subject to restriction and/or election requirement.  Application Papers  9) □ The specification is objected to by the Examiner.  10) ☒ The drawing(s) filed on <u>25 May 2001</u> is/are: a) ☒ accepted or b) □ objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) □ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. §§ 119 and 120  12) □ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) □ All b) □ Some * c) □ None of:  1. □ Certified copies of the priority documents have been received.  2. □ Certified copies of the priority documents have been received in Application No  3. □ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  13) □ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet.  37 CFR 1.78.  a) □ The translation of the foreign language provisional application has been received.  14) □ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  Attachment(s)  11) □ Interview Summary (PTO-413) Paper No(s)	Disposit	ion of Claims						
4a) Of the above claim(s) is/are withdrawn from consideration.  5) □ Claim(s) is/are allowed.  6) ☒ Claim(s) <u>1-7.14-27 and 29-36</u> is/are rejected.  7) ☒ Claim(s) <u>1-7.14-27 and 29-36</u> is/are rejected to.  8) □ Claim(s) are subject to restriction and/or election requirement.  Application Papers  9) □ The specification is objected to by the Examiner.  10) ☒ The drawing(s) filed on <u>25 May 2001</u> is/are: a) ☒ accepted or b) □ objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) □ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. §§ 119 and 120  12) □ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) □ All b) □ Some * c) □ None of:  1. □ Certified copies of the priority documents have been received.  2. □ Certified copies of the priority documents have been received in Application No  3. □ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  13) □ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet.  37 CFR 1.78.  a) □ The translation of the foreign language provisional application has been received.  14) □ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  Attachment(s)  11) □ Interview Summary (PTO-413) Paper No(s)	4)🖂	Claim(s) 1-36 is/are pending in the	e application.					
6  Claim(s) 1-7.14-27 and 29-36 is/are rejected.  7)  Claim(s) 8-13 and 28 is/are objected to. 8)  Claim(s) are subject to restriction and/or election requirement.  Application Papers  9)  The specification is objected to by the Examiner. 10)  The drawing(s) filed on 25 May 2001 is/are: a)  accepted or b) objected to by the Examiner.   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. §§ 119 and 120  12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).   a) All b) Some * ○ None of:   1.  Certified copies of the priority documents have been received.   2.  Certified copies of the priority documents have been received in Application No.   3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).   * See the attached detailed Office action for a list of the certified copies not received.  13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet.  37 CFR 1.78.  a) The translation of the foreign language provisional application has been received.  14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet.  37 CFR 1.78.		4a) Of the above claim(s) is	are withdrawn from	consideration.				
7) Claim(s) 8-13 and 28 is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement.  Application Papers  9) The specification is objected to by the Examiner.  10) The drawing(s) filed on 25 May 2001 is/are: a) accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. §§ 119 and 120  12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No.  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  a) The translation of the foreign language provisional application has been received.  14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.								
8		☑ Claim(s) <u>1-7,14-27 and 29-36</u> is/are rejected.						
Application Papers  9) ☐ The specification is objected to by the Examiner.  10) ☒ The drawing(s) filed on 25 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. §§ 119 and 120  12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) ☐ All b) ☐ Some * c) ☐ None of:  1. ☐ Certified copies of the priority documents have been received.  2. ☐ Certified copies of the priority documents have been received in Application No  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet.  37 CFR 1.78.  a) ☐ The translation of the foreign language provisional application has been received.  14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  Attachment(s)  1) ☒ Notice of References Cited (PTO-892)  5) ☐ Notice of Informal Patent Application (PTO-152)	7)🖂	☑ Claim(s) <u>8-13 and 28</u> is/are objected to.						
9) ☐ The specification is objected to by the Examiner.  10) ☒ The drawing(s) filed on 25 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. §§ 119 and 120  12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) ☐ All b) ☐ Some * c) ☐ None of:  1. ☐ Certified copies of the priority documents have been received.  2. ☐ Certified copies of the priority documents have been received in Application No  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  a) ☐ The translation of the foreign language provisional application has been received.  14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  Attachment(s)  1) ☒ Notice of References Cited (PTO-892)  4) ☐ Interview Summary (PTO-413) Paper No(s)	8)[	Claim(s) are subject to res	triction and/or election	requirement.				
10) ☐ The drawing(s) filed on 25 May 2001 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. §§ 119 and 120  12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) ☐ All b) ☐ Some * c) ☐ None of:  1. ☐ Certified copies of the priority documents have been received.  2. ☐ Certified copies of the priority documents have been received in Application No. ☐ .  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet.  37 CFR 1.78.  a) ☐ The translation of the foreign language provisional application has been received.  14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  Attachment(s)  1) ☐ Notice of References Cited (PTO-892)  2) ☐ Notice of Informal Patent Application (PTO-152)	Applicat	ion Papers						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. §§ 119 and 120  12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No.  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet.  37 CFR 1.78.  a) The translation of the foreign language provisional application has been received.  14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  5) Notice of Informal Patent Application (PTO-152)	9)[	The specification is objected to by	the Examiner.					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. §§ 119 and 120  12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No.  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet.  37 CFR 1.78.  a) The translation of the foreign language provisional application has been received.  14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  Attachment(s)  1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413) Paper No(s).  1) Notice of Draftsperson's Patent Drawing Review (PTO-948)  5) Notice of Informal Patent Application (PTO-152)	10)⊠	The drawing(s) filed on 25 May 20	<u>001</u> is/are: a)⊠ accep	oted or b)∐ objected	to by the Examiner.			
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. §§ 119 and 120  12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No.  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet.  37 CFR 1.78.  a) The translation of the foreign language provisional application has been received.  14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  Attachment(s)  1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413) Paper No(s).  11 Notice of Draftsperson's Patent Drawing Review (PTO-948)  5) Notice of Informal Patent Application (PTO-152)		Applicant may not request that any o	bjection to the drawing(s	s) be held in abeyance.	See 37 CFR 1.85(a).	1 101/4)		
Priority under 35 U.S.C. §§ 119 and 120  12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet.  37 CFR 1.78.  a) The translation of the foreign language provisional application has been received.  14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Prafisperson's Patent Drawing Review (PTO-948)  5) Notice of Informal Patent Application (PTO-152)	i	Replacement drawing sheet(s) include	ling the correction is req	uired if the drawing(s) is	Sobjected to. See 37 CFR	1.121(u <i>)</i> . 152		
12)			d to by the Examiner.	Note the attached Oi	lice Action of John F 10-	102.		
a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No.  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet.  37 CFR 1.78.  a) The translation of the foreign language provisional application has been received.  14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  Attachment(s)  1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413) Paper No(s).  5) Notice of Informal Patent Application (PTO-152)	Priority	under 35 U.S.C. §§ 119 and 120			10(-) (4) (8)			
37 CFR 1.78. a) ☐ The translation of the foreign language provisional application has been received.  14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  Attachment(s)  1) ☑ Notice of References Cited (PTO-892) 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  5) ☐ Notice of Informal Patent Application (PTO-152)	a *	<ul> <li>All b) Some * c) None c</li> <li>1. Certified copies of the prior</li> <li>2. Certified copies of the prior</li> <li>3. Copies of the certified copies</li> <li>application from the International See the attached detailed Office at Askrayuladament is made of a clair</li> </ul>	of:  ity documents have be ity documents have be es of the priority documents  ational Bureau (PCT foction for a list of the comestic priority	peen received. Deen received in Applionents have been received in Applionents have been received in 17.2(a)). The ertified copies not received in 18.5.5.	cation No eived in this National State eived. 19(e) (to a provisional ap	oplication)		
14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  Attachment(s)  1) ☑ Notice of References Cited (PTO-892)  2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  10 ☐ Interview Summary (PTO-413) Paper No(s)  50 ☐ Notice of Informal Patent Application (PTO-152)		37 CFR 1 78						
Attachment(s)  1) Notice of Praftsperson's Patent Drawing Review (PTO-948)  1.70.  Attachment(s)  4) Interview Summary (PTO-413) Paper No(s)  5) Notice of Informal Patent Application (PTO-152)	_	a) The translation of the foreign	language provisional	application has been	i received. 120 and/or 121 since a s	specific		
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413) Paper No(s).  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  5) Notice of Informal Patent Application (PTO-152)	14)	Acknowledgment is made of a clai reference was included in the first :	m for domestic priority sentence of the specif	fication or in an Appli	cation Data Sheet. 37 CF	R 1.78.		
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413) Paper No(s).  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  5) Notice of Informal Patent Application (PTO-152)	Attachme	ent(s)						
10/24	1) Not	tice of References Cited (PTO-892) tice of Draftsperson's Patent Drawing Revie	w (PTO-948) 9) Paper No(s) <u>5.6</u> .	5) Notice of Infor	mary (PTO-413) Paper No(s). mal Patent Application (PTO-1	52)		

Art Unit: 2115

#### **DETAILED ACTION**

1. Claims 1-36 are presented for examination.

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The current title is imprecise.

#### Claim Rejections - 35 U.S.C. § 112

- 3. The following is a quotation of the first paragraph of 35 U.S.C. 112: The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
- 4. Claim 18 rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Such as "a processor connected to the power line".
- 5. Claim 25 rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Such as "the processor comprises a control server".
- 6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- 7. Claims 14 and 26-27 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
  - a). The following term lack antecedent basic:Claim 14, line 2, "the control signal tp";

Art Unit: 2115

Claim 26, line 2, "the service provider".

b). The claim language in the following claims are not clearly understood: as to claim 27, lines 1-2, it is not clear understand what is mean by "if an appliance service"[i.e. only "if an appliance needs service"].

### Claim Rejections - 35 U.S.C. § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the 8. basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- Claims 1-7, 14-25 and 29-36 are rejected under 35 U.S.C. 102(b) as being anticipated by 9. Carr et al. (Carr), U.S. Patent No. 4,644,320.

As per claim 1, Carr discloses a device [14, figures 1, 2] for monitoring an appliance that receives power from a power source [col. 5, lines 12-15], the device comprising:

a first coupler [34, fig. 2] that couples the device to the power source [col. 5, lines 14-15, 39-42];

a second coupler [32, fig. 2] that couples the device to the appliance [col. 5, lines 15-16, 37-38; col. 6, lines 29-30];

a monitoring circuit [U4, fig. 2] connected between the first coupler and the second coupler to monitor power supplied by the source to the appliance [col. 5, lines 59-64; col. 6, lines 8-10, 28-44]; and

a communications circuit [U7, fig. 2] connected to the monitoring circuit, wherein the monitoring circuit provides data based on the monitored power to the communications circuit [col. 6, lines 55-65; col. 9, lines 44-49].

Art Unit: 2115

As per claim 2, Carr discloses that the communications circuit includes a receiver [U7, fig. 2] that receives a signal from the first coupler to control the monitoring circuit [col. 6, lines 55-65].

As per claim 3, Carr discloses that the communications circuit includes a transceiver [U7, fig. 2] that receives a signal from the first coupler to control the monitoring circuit and to transmit monitored power data [col. 6, lines 55-65].

As per claim 4, Carr discloses that the communications circuit comprises a power line carrier transceiver and a power line driver coupled to the monitoring circuitry and the first coupler [U7, fig 2; col. 6, lines 55-65].

As per claim 5, Carr discloses that the monitoring circuit measures current drawn by the appliance [col. 5, lines 59-64; col. 6, lines 28-44].

As per claim 6, Carr discloses that the monitoring circuit includes a processor [U4, fig. 2], that determines an operating state of the appliance based on the measured current [col. 5], lines 59-64; col. 6, lines 28-44].

As per claim 7, Carr discloses that the monitoring circuit includes a memory that stores the measured current and periodically sends measured current data to the first coupler [col. 6, lines 36-44, 55-58; col. 8, lines 12-15].

As per claim 14, Carr discloses that a switch [relay control 19, fig. 2] connected to the first coupler wherein the switch is opened in response to a control signal for preventing power from the source from being supplied to the appliance [col. 5, lines 42-45].

As per claim 15, Carr discloses that a switch [voltage divider 38, fig. 2] connected to the first coupler to adjust the amount of power received by the appliance in response to the control signal [col. 5, line 59-col. 6, line 14].

As per claim 16, Carr discloses that the first coupler comprises a first pin for connection to a live line and a second pin for connection to a neutral line [34, fig. 2].

Art Unit: 2115

As per claim 17, Carr discloses that a first power line and a second power line connecting the first and second couplers, wherein the second coupler includes a first slot connected to the first pin through the first power line and a second slot connected to the second pin through the second power line [see connection between 34 and 32 in fig. 2; col. 5, lines 15-17].

10. As per claim 18, Carr discloses a system for monitoring an appliance that receives power from a source [fig. 1, col. 2, lines 27-30], the system comprising:

a power line [18, fig. 1] connected to the source [col. 5, lines 40-42];

a circuit [14, fig .1] connected to the power line and the appliance [col. 5, lines 14-17] to monitor power supplied to the appliance [col. 2, lines 27-44]; and

a processor [24, fig. 1] connected to the power line [col. 5, lines 21-23],

wherein the circuit sends a signal to the processor through the power line and the signal is based on the power supplied to the appliance [col. 6, lines 55-65; col. 9, lines 44-49].

As per claim 19, Carr discloses that the circuit comprises:

a first coupler [34, fig. 2] that couples the circuit to the power line [col. 5, lines 14-15, 39-42];

a second coupler [32, fig. 2] that couples the circuit to the appliance [col. 5, lines 15-16, 37-38; col. 6, lines 29-30];

a monitoring circuit [U4, fig. 2] connected to the first coupler and the second coupler to monitor power supplied by the source to the appliance [col. 5, lines 59-64; col. 6, lines 8-10, 28-44]; and

a communications circuit [U7, fig. 2] connected to the monitoring circuit, wherein the monitoring circuit provides data based on the monitored power to the communications circuit for output to the first coupler [col. 6, lines 55-65; col. 9, lines 44-49].

As per claim 20, Carr discloses that the circuit comprises a plug and the first

Art Unit: 2115

coupler comprises a first pin for connection to a live line and a second pin for connection to a neutral line [34, fig. 2].

As per claim 21, Carr discloses that the monitoring circuit further comprises a first power line and a second power line connecting the first and second couplers, and the second coupler comprises a first and second slot, with the first slot connected to the first pin through the first power line and the second slot connected to the second pin through the second power line [see connection between 34 and 32 in fig. 2; col. 5, lines 15-17; col. 6, lines 55-60].

As per claim 22, Carr discloses the processor receives signals transmitted on the power line from the circuit and determines a state of operation of the appliance based on the signals [col. 8, lines 2-20].

As per claim 23, Carr discloses that the circuit includes a receiver [U7, fig. 2] for receiving signals sent from the processor on the power line [col. 6, lines 55-65; col. 8, lines 6-15].

As per claim 24, Carr discloses that the appliance's operating state is controlled based on the signals sent to the circuit from the processor [col. 8, lines 6-15].

As per claim 25, Carr discloses that a connection to a service provider [12, fig. 1], wherein the circuit that sends signals to the service provider about the operation of the appliance [col. 6, lines 55-65; col. 8, lines 6-15].

11. As to claims 29-33 and 35 are written in means plus function format and contain the same limitation as to claims 1-3, 5, 6, 14 respectively, therefore the same rejections applied.

As per claim 34, Carr teaches that monitoring means determines power used by the appliance [col. 6, lines 28-39].

12. As per claim 36, Carr discloses that a retrofit plug adapted to be received by an appliance that receives power from a source [figures 1, 2], the retrofit plug [14, fig. 2] comprising:

Page 7

Application/Control Number: 09/755,203

Art Unit: 2115

a live pin; a neutral pin; a first line connected to the live pin; a second line connected to the neutral pin [fig. 2];

a fist slot, connected to the first line, for receiving a pin from the appliance; a second slot, connected to the second line, for receiving a neutral pin from the appliance [see wire connection between 32 and 34 in fig. 2; col. 5, lines 14-17];

a transformer [R3, fig. 2, col. 7, lines 26-27] connected to monitor the first and second lines [fig. 2];

a measurement circuit [U4, fig. 2] connected to the transformer for measuring current supplied to the appliance [col. 5, lines 59-64; col. 6, lines 28-44]; and

a power line carrier transceiver for encoding a power line carrier signal based on the measured current [col. 6, lines 55-65; col. 9, lines 44-49].

#### Allowable Subject Matter

13. Claims 8-13 and 26-28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

## Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chun Cao at (703) 308-6106. The examiner can normally be reached on Monday-Friday from 7:30 am - 4:00 pm. If attempts to reach the examiner by phone

Art Unit: 2115

are unsuccessful, the examiner's supervisor Thomas Lee can be reached at (703) 305-9717. The fax number for this Art Unit is following: Official (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 306-5631.

Chun Cao

Jan. 8, 2004